



Table 1: The Ratios of Substrate to Chiral Ligands (S/C)

Entry ^a	Ligand	S/L	Conversion (%)	33 : 34	e.e.(%)
11	2b4b	10000	68	1 : 0.015	96.0 (R)
12	2b4b	5000	81	1 : 0.005	97.7 (R)
13	2b4b	2000	82	1 : 0.005	98.1 (R)
14	2b4b	1000	100	1 : 0	99.3 (R)
15	2b4b	200	100	1 : 0	99.5 (R)
16	2b4b	100	100	1 : 0	99.5 (R)
17	2b4b	20	100	1 : 0	99.6 (R)
18	2b4b	10	100	1 : 0	99.6 (R)
19	2b4b	5	100	1 : 0	99.7 (R)
20	2b4b	2	100	1 : 0	99.6 (R)

^a. All of the above reactions used benzaldehyde as the substrate, toluene as the solvent. ^b. 3.7 eq. of Et₂Zn was used. ^c. The reaction were carried at -20°C for 12hrs. ^d. S/C was the ratio between the substrate and chiral ligand.